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ABSTRACT

This paper examines young adolescents' involvement with popular music and the health implications of that involvement. Initial discussion explores three central concepts: music media, adolescence, and mass media effects. A summary of research on music media in adolescence is offereed in two sections discussing exposure to, and gratifications and interpretations of, popular music, and exposure to, and gratifications of, music videos. Also discussed are the messages, interpretation, and effects of popular music. Content analyses reveal that although negative and objectionable messages and images can be found in music and music television, the value orientation of most music is rather mainstream and traditional. Because music videos add the visual dimension and many young adolescents pay little attention to lyrics, videos may have stronger effects on social learning than audios. Very little taboo or deviant behavior appears on Music Television (MTV). It should not be assumed that what adults see in a song or video will be what teens see, or that all teens will see the song or video in the same way. Although adolescents report learning about important issues from music, little is known about the learning or behavioral effects that occur. Concluding discussion offers recommendations for policy and research. A total of 140 references are cited. (RH)

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POPULAR MUSIC IN EARLY ADOLESCENCE

Peter G. Christenson
Donald F. Roberts

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EXECUTIVE SUMMARY

I. Introduction. Though popular music and associated music media -- radio, records/tapes, music videos -- have an important place in the lives of adolescents, academic researchers have ignored their role in adolescent development. There is a need to examine carefully the uses and effects of popular music, especially in relation to youth in the stages of early adolescence.

II. Central Concepts. There are two competing views of early adolescence. First, there is a popular view which paints the period as a time of enduring storm and conflict, using such characterizations as "generation gap" and "identity crisis." The picture drawn by the empirical literature, however, is much more optimistic. To be sure, adolescence is a time of many changes and adjustments, and these can be stressful. For most teens, however, the period does not seem to be stormy or conflictual.

There is a great deal of variation among adolescents in how they approach their developmental tasks, both in terms of the severity of the adjustment and the timing of it. These variations are related to such factors as age, gender, race, and social class. Adolescence is a period of intense information-seeking and media use, and because of the nature of the adjustments required, especially the social adjustments, popular music fits especially well into adolescents' lives. Any study of

teens' music use must take into account their differences as much as their similarities.

There are also two competing models of media effects. Again, the popular view is the more dramatic, assuming that because so many teens watch and listen, there must be massive media effects. The research conflicts with this view, suggesting that strong media effects are much more likely to be felt only among particularly susceptible sub-groups. Media effects, in general, should be seen as "conditional" on such factors as personality and social background. Media effects, then, depend on context receiver characteristics; not everybody interprets messages or responds to them the same way.

III. A Summary of Research on Music in Adolescence. The music media's primary thematic focus -- love, dating, sex, romance-- corresponds to adolescents' increasing interest in cross-sex relationships. Teens may be particularly sensitive and receptive to messages on such themes. A variety of health issues are either directly dealt with or strongly implied in music media content, including sex, teenage pregnancy, alcohol and drug use, and how to cope with stress. To date, though, we can only guess what impact these messages have on adolescents.

Interest in "pop" or "rock" music, though considerable even among early grade school children, accelerates at about 3rd or 4th grade. By the end of grade school, no other music type competes seriously. Radio and music listening in early

adolescence runs about 2-3 hours a day, with record and tape listening taking up another hour or so. Music video viewing averages somewhat less than an hour. A good estimate of the total amount of time early adolescents attend to all music media would be 4-5 hours a day, though much of that occurs as background. Girls listen more than boys, Blacks more than whites. Blacks and Hispanics spend more time watching music videos than whites.

Music taste preferences become more specific with increasing age; identification with music types (heavy metal, new wave, rap, etc.) becomes quite intense by high school. Boys prefer the "harder" forms of rock, girls the softer, more romantic forms of "pop." Race, ethnicity, and social background are all strong predictors of music preference.

Music meets a variety of personal needs for young adolescents, primary among them being mood control and silence-filling. Music has a variety of social uses as well, ranging from providing a party atmosphere to expressing rebellion against authority, though the latter function is not as common as popular conceptions make it out to be. Music "style" -- that is, a type of music and a behavioral style that goes with it -- is closely related to the subgroup or "crowd" structure in schools. Teens who express alienation from the school culture and delinquent tendencies tend to prefer hard rock and heavy metal music: this group, apparently, does use music partly as an expression of disaffection and defiance.

Girls typically find music more functional, that is, report more gratifications from it, than boys. They pay more attention to lyrics, use it more to ease feelings of loneliness, and use it more for dancing.

Young adolescents' three primary reasons for watching music videos are: for the music itself, for song interpretations, and for the stimulating visuals. Blacks are more likely than whites to say they watch view music videos to "learn about the world."

IV. Messages, Interpretation and Effects. Though there are negative and objectionable messages and images in music and music television, content analyses indicate the value orientation of most music is rather mainstream and traditional. Most of the lyric content that has so concerned many critics is concentrated in a few genres, like heavy metal and rap. Fans of these types of music will get a much heavier dose of the objectionable material than most adolescents. Popular music lyrics and music videos are rich with negative and positive images.

Because music videos add the visual dimension, and because many young adolescents pay little attention to lyrics, videos may have stronger effects on social learning. Violence of some kind occurs in about half of all videos, but this includes mostly mild forms, like shoving and wrestling. Portrayals of sexual intimacy, though common, are more implied than explicit. Very little taboo or deviant behavior appears on MTV. Black-oriented videos tend to have more positive messages and fewer social

protest themes than MTV videos.

Studies of young adolescents' comprehension of the themes in songs and videos demonstrate: 1) that they often understand these themes much differently than adults; indeed, they often "miss the point"; 2) their interpretations are quite disparate; and 3) many of the differences in interpretations can be traced to social background, gender, race, personality and developmental variables. It should not be assumed that what adults see in a song or video will be what teens see, or that all teens will see it the same way. Differences in the meanings teens construct for songs will produce variations as well in the effects of those songs.

Little research has focused directly on the effects of music media consumption, but some tentative conclusions seem warranted. First, there is little reason to think that attendance to music media displaces time for more highly valued activities like schoolwork; it is more likely to replace other media or leisure activities. Partly this is because music operates so often as a background activity. The available evidence suggests that studying while listening to rock or pop is detrimental to learning. Generally, heavy music media users do less well in school, but there is no evidence yet that music causes poor school performance.

Some effects of music media are clear. First, music influences listeners' mood states. Generally, such effects are in the direction of better mood, but there is a concern that some

youth may sink deeper into bad moods from listening to certain music. There have been accounts of heavy metal listening being associated with cases of teen suicide. Second, music has an impact in social settings -- in dancing, parties, providing topics for conversation, and so on. It is possible that, in certain alienated subgroups, music involvement may define, heighten, or accentuate the group's rebellious stance.

Although adolescents report learning about important issues from music, little is known about the specific learning or behavioral effects that occur. Correlational studies suggest that adolescents who are "at risk" in certain ways -- for instance, who are alienated from school or have delinquent tendencies -- choose music that may be especially expressive of their concerns. But there is no direct evidence either way on such questions as whether listening to heavy metal, for example, influences the outlook of alienated youths. One experiment on music video viewing has demonstrated that, in the short-term, viewing can increase approval of premarital sex and decrease disapproval of violence.

Research on public health campaigns aimed at adolescents suggests that the music media may be more useful in stimulating interpersonal communication about health issues (like smoking) than in directly influencing attitudes or behavior. There have been some innovative efforts to use popular music directly to influence adolescents' health behaviors. A public health program in Latin America, for instance, employed a popular song written

expressly to promote sexual abstinence. The song and music video received wide air play and there are suggestions that many teens understood the message. Although the Latin American context is different from the U.S., the possibility of using music media in this way in the U.S. should be considered.

V. Policy and Research Recommendations. Several recommendations are made concerning music media and health policy, including: using PSAs to encourage seeking additional help, rather than to change health beliefs and attitudes directly; using music personalities and stars more in interpersonal settings; evaluating the effectiveness of music media-based public health spots; targeting health messages less to general audiences and more to specific at-risk subgroups; aiming more at preventing risky behavior from starting than at stopping it; and funding research into the impact of music media.

Research recommendations include: a large-scale national survey of music media use and its relation to health beliefs and behaviors; the inclusion in the survey of large samples of ethnic and racial subgroups; a separate over-time panel study (or studies) to allow causal inferences; and experimental research to assess the effectiveness of print sources (e.g., liner notes on records) to convey health information.

I: INTRODUCTION AND OVERVIEW

This paper examines young adolescents' involvement with popular music and the health implications of that involvement. As we will show, 10- to 15-year-olds listen avidly to pop music. One simply cannot pretend to understand young adolescents without considering the place of music in their lives.

Of course, the centrality of music to teenagers is not surprising to the parent of a typical teenager. What is surprising is the extent to which academicians have overlooked the connection between music and youth. Greeson (1986) recently found an average of only 4 pages per adolescent psychology textbook devoted to media influence, and fully half of the volumes ignored media completely! Though Greeson did not separate music from television in his analysis, our observation is that television receives almost all the attention.

Mass communication researchers have also taken too narrow a view. First, those concerned with media and youth tend overwhelmingly to focus on television to the virtual exclusion of popular music and MTV (cf. Christenson, DeBenedittis & Lindlof, 1985). Second, with few exceptions, even the best writing on music and youth in the communication discipline has failed to pay any serious attention to the literature on adolescent development. In this paper we attempt to avoid this narrow disciplinary focus.

We are aware of, and to a great extent share, current concerns about the images and messages in popular music and MTV. We believe, however, that it is important to temper one's natural offense and outrage at the violence, sexism, and apparent depravity of some of the content with a measured view of current research and thinking on media uses and effects. Thankfully, there is little reason to believe that the offensive lyrics and gruesome videos to which so many point with horror are likely to produce the strong, direct, negative effects so often feared.

We have several tasks. Specifically, we:

** introduce the discussion by defining some key concepts and debates relating to music media and adolescence;

** discuss the extent and nature of young adolescents' involvement with music media;

** speculate on the effects of music involvement on adolescents' health and well-being;

** suggest some concrete ways in which political and social actors concerned with adolescent development may exploit adolescents' immersion in music to improve their health and well-being; and finally,

** outline some critical lines for future research.

II: CENTRAL CONCEPTS

Before we begin a detailed discussion of the research on music media and adolescence, we need to define and discuss three central concepts: 1) music media; 2) adolescence; and 3) mass media effects. The reasonable place to start is with a definition of the phrase "music media" -- that is, to specify what media are included in the scope of this paper. From that

point we explore some alternative models of adolescent development and discuss how they might relate to media behavior. Finally, we examine two competing views of mass media influence: the popular image of massive and powerful media effects versus the "limited effects" picture painted by much empirical research.

A. The Music Media

The term "music media" recognizes that popular music, as a cultural form, does not conform to any single mode of distribution or commercial structure: music can be heard and be learned about from a variety of sources. For the young adolescent, the primary source is probably the radio. Most radio stations are music stations, and the overwhelming evidence is that it is the music that brings adolescents to the radio. At the same time, however, adolescent radio listeners are not unaware of or inattentive to the other content of radio -- the news, advertising, and public service announcements. Radio, then, is a "music medium" in that it is primarily a source of music, but it is not limited to music.

Personally controlled media -- records, cassette tapes, and compact disks -- also deliver music. Much more than radio, these are thought of as purely music, but there is quite a bit of print (liner notes, lyrics, etc.) and graphic information as well, and all such "extended," non-musical information also must be seen as part of the message. In fact, much of the furor surrounding certain hard rock or heavy metal albums (for example, the

depiction of a woman in bondage on the cover of the Rolling Stones' "Undercover" album) has been stimulated as much by the cover art as by anything in the music per se. And one wonders if we would see anything like the current reaction to objectionable lyrics if they were not offered in printed form as part of the music packaging.

The third major music medium is music video. The primary implication for adolescent development in terms of music video is obviously the addition of the visual dimension, but music television as a format offers much more than just music videos. Essentially, it is music radio set to pictures, and contains much of the extended content of radio, including deejay patter, advertising, music news, public service announcements, and so on.

Popular music, then, is a culture that spreads throughout various media, and each of these music media extends well beyond what most think of as their central content. One could even consider the boggling assortment of teen and pop music magazines to be music media; clearly, they are about the music culture and play important informational and interpretive roles. Since almost nothing is known about the impact of all this ancillary content, it will be omitted from our review of research. In the final section of the paper, though, we will suggest ways in which the various extensions of the music media might be used in media campaigns dealing with health issues in adolescence.

B. Models of Adolescent Development

1. Two competing views

The dominant characteristic of adolescence is change--change in physical, social, emotional, and intellectual functioning. At issue, however, is the persistency and intensity of the change. Should adolescence be viewed as a decade-long storm, or as a more temperate weather regime bringing occasional showers?

Popular discussions often assume the storm model, characterizing adolescence as a period of persistent turmoil and conflict. The teen years are described in terms of identity crises, generation gaps, difficult and persistent family strife -- a period of dramatic, anxiety-producing changes in most areas of life. A long tradition of "classical" theorizing about adolescence (cf. Coleman, 1978), coupled with the news media's taste for conflict and "bad news" (e.g., eating disorders, teen suicide, violent crime, drug use) have contributed to the popular treatment of adolescence as a period of sturm und drang.

Many individuals do encounter massive, even debilitating, crises during their teen years, and all adolescents experience some difficulty as they face issues central to becoming successfully functioning adults. Nevertheless, little of the empirical literature supports conceptualizations of enduring storm and stress. There is scant evidence for notions of generation gaps or persistent adolescent crises (Bandura, 1972; Douvan & Adelson, 1966; Monge, 1973; Westley & Elkin, 1957), and

recent surveys do not find constant family conflict to be the norm (e.g., Coleman et al., 1977; Youniss & Smollar, 1985). If anything, there are remarkably few crises. Indeed, considerable intergenerational continuity exists between parent and adolescent in fundamental values -- for example, those dealing with race, marriage and sex, morality, and religious and political orientations (Bengston, 1970; Jennings & Niemi, 1975; Offer & Offer, 1975; Steinberg, in press). The conflicts that do emerge focus on less fundamental issues such as music, dating, leisure activities, tidiness, and punctuality (see Coleman, 1978; Coleman, George & Holt, 1977; Douvan & Adelson, 1966).

The question, then, is how to reconcile the two views of development. Coleman (1974, 1978) combines the two approaches. He conceptualizes the major issues of adolescence in terms of changes in the full range of social relationships (e.g., being alone, self-image, heterosexual interactions, parental relationships, friendships, large group situations, the connectionciety) and agrees that

most teenagers experience significant concern, and probably stress, over each. However, he also notes that empirical findings show that different issues are of concern to different teenagers at different times. One group of teens, for example, may be concerned with heterosexual relationships early in adolescence and with fears of peer group rejection somewhat later; another group may reverse the order. In other words, Coleman (1974, 1978) suggests that adolescents simultaneously

adjust to stressful change and maintain relative stability because for the most part they focus on one issue at a time.

In short, it is possible to conceive of adolescence as a time of rapid change, hence of psychological, social, and behavioral disruption. But as the failure of empirical evidence to find continual storm and stress demonstrates, it is also important to understand that most adolescents deal with that change in relatively functional ways, spreading their tasks over a long enough period of time to avoid major crises. The problem, of course, lies with those teenagers who, for whatever reasons, have more than one issue to cope with at a time, or who lack the skills to deal with even one.

2. Adolescent issues and tasks

Most theories of adolescence recognize a number of central issues or tasks that characterize the period. These include forming an identity, developing a positive body image, acquiring and honing formal problem solving capabilities and autonomous moral reasoning, more completely defining sex roles and learning about cross-sex relationships, achieving independence from the family, establishing workable peer relations, preparing for future occupational, family, and civic roles, and so on (cf. Adams & Gullotta, 1983; Avery, 1979; Conger & Petersen, 1984; Faber, Brown & McLeod, 1979; Feldman & Elliott, in press; Violato & Holden, 1987).

Most of these issues can be categorized in terms of four levels of social relations. That is, the tasks of adolescence concern developing functional relationships with (1) the self, (2) peers, (3) the family, and (4) the larger social environment (e.g., the school, the community, the mass media). The picture is further complicated by its reflexivity: the information needed to resolve issues concerning social relationships at any level must come from the very social relationships that are at issue. We learn about social institutions not only from institutions (schools teach us about governments -- and about schools), but also from the comments and instruction of parents and peers and from personal observation. Similarly, development of a positive body image can be viewed in terms of the self, but it also implicates peer and family relations, as well as interactions with social institutions such as the mass media.

These observations have several important implications for how teenagers use and respond to mass communicated messages. First, periods of change, whether conceptualized in terms of a polity changing governments or a thirteen-year-old adjusting relations with her parents, are periods of uncertainty, and periods of uncertainty are usually periods of increased information seeking and processing (cf. Berlyne, 1965; Roberts, 1971, 1973; Schramm, 1965). Moreover, parental controls on media use and information seeking fall away quite rapidly near the end of childhood (Comstock et al., 1978; Faber, Brown & McLeod, 1979). Adolescence, then, is a period of intense information

gathering characterized by increasing personal control over how information needs will be satisfied. In short, adolescence brings both information seeking and information independence, and the mass media play an increasingly important role in providing information relevant to many of the questions teenagers face.

In terms of our current focus, teens may glean a good deal of applicable information from music media -- from song lyrics, MTV visuals, record liner notes, public service announcements inserted in a radio broadcast schedule. This is not to say that "objective" observers would label it correct or adequate information, or that the interpretation a 13-year-old might place on it would be the same as that of the lyricist, a music critic, or a parent. Indeed, the meaning is unlikely to be the same even for another 13-year-old. The assignment of meaning is a constructive act (Leming, 1987; Roberts, 1971; Schramm, 1973). What any message "means" depends at least as much on what the individual brings to the message as on what the message provides the individual. And as noted above, there is a great deal of variation among adolescents, much of it located by which adolescent tasks are central, when, among which teenagers.

In short, media in general and music media in particular are important sources of information for adolescents, but the effects of such messages cannot be predicted from any simple analysis of their manifest content. Rather, the developmental differences and interpretational processes described above point to the importance of an "individual differences" approach to studying

music media and adolescence (Roberts, in press). That is, we urge an approach that recognizes that social, personality and structural differences lead to important variations in how adolescents deal with their developmental tasks, hence how they will interact with, interpret, and respond to music media.

C. Competing Models of Media Effects

Popular discussions of mass communication are often cast in terms of large, direct, and negative effects. Although typically the finger points at television (e.g. Postman, 1982; Winn, 1985), expressions of concern with the impact of radio, recordings, and video game arcades have appeared (e.g., Parents Music Resource Center, n.d.; Toufexis, 1989). This approach assumes that because mass media reach many people, they engender massive effects, which is to say affect masses of people. Receivers are viewed as passive, at least as far as message interpretation is concerned. The critical event is exposure; there is little attention to variation in how messages are responded to, either across people or across time. Hence, policy debate often focuses on various means of message control -- changing messages, labeling messages, censoring messages.

Empirical research on mass media effects, on the other hand, consistently draws a different picture (cf. Comstock, et al., 1978; McGuire, 1986; Roberts & Maccoby, 1985). If "massive effect" is construed to mean dramatic changes in large numbers of people, then even the earliest empirical work on the consequences

of mass communication failed to demonstrate much of an impact (Berelson, Lazarsfeld & McPhee, 1954; Lazarsfeld, Berelson & Gaudet, 1944; Klapper, 1960). That is, relatively few people changed their votes as a result of political pamphleteering, fled from the Martian invaders after "The War of the Worlds," or behaved in dramatically new or different ways as a function of media exposure.

More recently, William McGuire (1986) reviewed the current empirical research on media effects, including the impact of product advertising, political campaigns, violent and stereotyped television portrayals, and television news. His conclusions are summarized by the title of the article: "The Myth of Massive Media Impact." There are simply no studies of mass media effects that demonstrate huge changes in the behavior of large numbers of readers, listeners, or viewers. McGuire does not argue that there are no effects, however. Small effects, that is effects on smaller numbers of people, have been documented in many studies. Moreover, failure to find evidence for "massive" effects does not mean that they do not exist. Possibly, it means only that they have not been empirically demonstrated. McGuire devotes much of his paper to "salvaging" the myth by examining a variety of conceptual and methodological explanations for the failure to find massive media effects.

In the end, it may not be productive to search for "massive" media effects. Such a focus not only confuses "massive" with "important," it ignores critical differences among audience

members, who seldom respond in similar ways to a given message. Obviously, it is important when the mass media directly influence the behavior of many people, but large numbers are not necessary for importance. In some elections, a two percent change in the vote is critical; in some school systems, a gain or loss of only two or three percent in the number of graduates going on to college is important; for rock music stations, an audience gain or loss of two or three percent can mean survival.

A recent development in mass communication research, labeled the "conditional approach" to media effects, recognizes that different sub-sets of individuals process and respond to mass mediated messages in different ways (McLeod & Reeves, 1980; also see Roberts & Maccoby, 1985). Thus, rather than examining undifferentiated samples of viewers and basing effects inferences on changes in some small portion of them, conditional research attempts to specify a set of conditions or attributes which define a sub-population that should be particularly responsive to a given message. It then looks for changes in most members of that sub-population (Chaffee, 1977). The challenge of the conditional approach is to define characteristics or conditions which locate differential responses within sub-populations on a priori, theoretical grounds. Our contention, of course, is that identification of the adolescent task with which given teenagers are engaged will locate powerful predictive conditions.

Finally, two additional distinctions concerning media effects are necessary. First, there is a difference between the

effect of a medium and the effect of message content. The overwhelming tendency in both popular and scholarly discussions of mass media is to focus on message content. We don't want to burn all books, ban all television, and label all music; we want to burn certain books, censor certain television shows, and label certain albums. Obviously, content effects are important. Nevertheless, important effects may derive from the media irrespective of content. Media consume large amounts of time, they displace other activities, they change moods, they provide important social linkages. Such consequences are too important to ignore.

We also need to distinguish between intended and unintended effects -- between messages that are or are not designed to engender a specific outcome of interest (i.e., the willowy songstress intends to entertain and garner a large following; she probably does not intend to make a statement about what constitutes an appropriate body image). Individuals interpret and respond to messages differently depending on whether they think the goal of the message is to inform, to educate, to entertain, or to persuade (cf. McGuire, 1986; Blosser & Roberts, 1985; Schramm, 1971). This is important in the current context because we are concerned both with entertainment messages (for example, the consequences of hard rock lyrics) and with informational, educational, and/or persuasive messages (for example, the effects of anti-smoking public service spots broadcast by local radio stations). Ultimately, much of the

determination of message intent rests with the receiver, not the source.

Our approach to media effects, then, presumes that important effects need not and probably will not implicate a large proportion of the total audience. Rather, we expect adolescents to respond to music media in terms of a variety of social, psychological, and physical conditions, any of which influence how they use the media, how they interpret messages, and whether, when, and how they act on what they have learned. In a sense, this calls for a redefinition of what constitutes a relevant audience. We need to think about which conditions unique to adolescence will help us to differentiate relevant groups of adolescents, both in terms of their choice and use of media and their responses to mediated messages.

III: A SUMMARY OF RESEARCH ON MUSIC MEDIA IN ADOLESCENCE

A. Popular Music: Exposure, Gratifications, Interpretations

1. Amount of use

Obviously, popular music is important to adolescents. Leming (1987) reports that 46% of a sample of 11- to 15-year-olds said music was "very important" to them, with another 47% saying it was "somewhat important" (only 7% said it was "not important at all"). For many adolescents, particularly those in the late teens, music listening is preferred to television viewing. Indeed, Roe claims "it is becoming increasingly difficult to escape the conclusion, in terms of both the sheer amount of time

devoted to it and the meanings it assumes, that it is music, not television, that is the most important medium for adolescents" (Roe, 1987, pp. 215-16).

For most adolescents, music listening, whether from radio, records, tapes or CDs, is a daily activity, as natural a part of the environment as the air they breathe or the walls around them. And like air or walls, music can surround them, can be there, without them being much aware of its presence. More than television, certainly, music plays a background role, forming the audio backdrop or context for other activities. This quality, of course, is a key strength of audio media. In terms of how much is consumed, though, the ease with which music can slip into the background presents some tricky problems in measurement. If one asks a 15-year-old if, when, or how much he listened to the radio yesterday, the answers are likely to reflect a bias toward conscious use, times he was aware of listening. Hence, they may significantly underestimate actual amount of exposure. Such underestimates are probably inherent in the self-report data on which the following generalizations are based.

Popular music listening increases through early childhood, accelerates about 3rd or 4th grade (age 9 or 10), and peaks in late high school or college. Television use, by comparison, rises to a peak in earlier adolescence (about age 12 or so), then declines during the years when interest in music rises to its highest point (Christenson & DeBenedittis, 1986; Christenson, DeBenedittis & Lindlof, 1985; Comstock et al., 1978; see

especially Larson & Kubey, 1983, and Larson, Kubey & Colletti, 1989, for a comparative treatment of age trends in music and TV use). At its peak in middle to late adolescence, actual time spent with music is roughly comparable to time spent with television: on average, both "occupy" (that is, both media are on) between four and five hours a day. Table 1 presents unpublished data gathered from a largely middle class. Caucasian (61% white, 19% Asian, 11% Hispanic; 8% Black and others) sample of California teenagers (hereafter called "the California sample"). It shows 7th graders reporting over 2 1/2 hours of daily listening, while 9th and 11th graders claim over 3 1/2 hours of daily listening to all music sources (radio, records, tapes, music videos).

Table 1

Adolescents' Average Minutes of Media Use on a Typical School Day

Medium	7th Grade	9th Grade	11th Grade
Television Viewing	108	145	120
TV-News Viewing	27	28	30
Reading for School	57	63	69
Reading for Pleasure	47	31	29
Radio Listening	85	111	103
Record/Tape Listening	64	82	89
Music Video Viewing	41	32	23
All Music Listening	158	218	215

Radio. Of course, not all radio is music and not all music is from radio. The distinction is purely academic on the first count, at least for adolescents. For them, the primary attraction of radio is music, not talk, and they listen almost exclusively to music stations (Christenson and DeBenedittis, 1986). On the second count, that music is obtained from non-radio sources, there is simply too little information. Most studies of music incorrectly take radio listening as a surrogate for all music use, leaving other sources out of consideration. The data presented in Table 1 represent one of the few exceptions to this approach.

Radio use begins quite early in childhood (in fact, one of the key advantages of radio for children is that they can operate the simple hardware), but it seems to take off especially rapidly around third or fourth grade (Christenson & DeBenedittis, 1986). By the end of grade school, by far the majority of children listen to radio at some point in the day. There is also some tentative evidence that frequency of listening depends on such factors as region of the country or city size: a comparison of two studies using identical measures, one in a mid-sized radio market in central Pennsylvania (Christenson & DeBenedittis, 1986) and the other in the major market of Portland, Oregon (Christenson, Begert, & Gunther, 1989), shows considerably higher listening levels in the latter setting. Later in adolescence, radio listening becomes a daily activity for all but a few teens: the Radio Advertising Bureau reports that radio reaches over 90%

of U.S. teenagers at some point in the normal day (RAB, 1988).

The reports on time spent present a range of estimates, but consistently find a dramatic increase in attention to radio at the onset of early adolescence. Two studies conducted in the 1970s (Dominick, 1971; Lyle & Hoffman, 1972) found daily radio listening among sixth graders to be about two hours a day, and Lyle and Hoffman reported amounts significantly in excess of that among tenth graders. A 1988 report estimated the daily amount for 12- through 17-year-olds at 2 hours, 48 minutes based on 1976 data or 2 hours, 9 minutes based on 1986 data (RAB, 1988). In a study of academically gifted 11-15 year olds, Leming (1987) found a weekday average of 2.5 hours and a weekend day average of 3.5 hours, yielding an overall daily average just a few minutes under 3 hours. The data in Table 1 show 7th graders listening to radio about 1 1/2 hours on an average school day, with older teenagers reporting just under two hours per day. The highest estimate we have encountered comes from Brown et al. (1989) whose data on 12-14 year olds showed radio listening to average slightly over five hours a day.

Such disparate findings make it difficult to achieve any satisfying closure on the question, "How much radio do adolescents listen to?" To conclude that they listen to somewhere between 2 and 5 hours a day is to conclude very little, really, except that they listen a great deal. In part the problem stems from difficulties inherent in defining and measuring radio listening, an "activity" which is often passive,

which slips constantly between foreground and background, and which does not chunk very easily into the half-hour or hour-long slots that television viewing does. Add to that the differences in research methods (data collection procedures, questions posed, etc.) and sample characteristics (age groups, geography, socioeconomic status, etc.) and the scattered estimates seem altogether predictable. All of this points clearly to the need for coordinated research programs employing clearly explicated variables and systematic national samples.

Records and tapes. Little attention has been given to the use of records, cassette tapes and compact disks, all modes of music delivery that are more personally controlled and less preprogrammed than radio. Certainly these other music sources are used frequently: in one report, 33% of 9-11 year olds and 60% of both 12-14s and 15-17s listened to records "every" or "most" days (Newspaper Advertising Bureau, 1980). The new data presented in Table 1 show 7th graders reporting just over one hour and 9th and 11th graders almost an hour and a half of record and tape listening on an average school day. Leming (1987) also found record and tape use ranging from about an hour on weekdays to an hour and a half on weekend days. His estimate of time spent with all audio media -- radio, records and tapes -- was 28 hours a week, 4 hours a day.

Gender and race both relate to amount of music use. Girls consistently listen more than boys, especially after the beginning of adolescence (Brown et al., 1989, in press; Brown,

Campbell & Fischer, 1986; Greenberg, 1973; Lyle & Hoffman, 1972; Newspaper Advertising Bureau, 1980; Roe, 1984; Schramm, Lyle & Parker, 1961). They also appear to begin the shift toward music and away from TV at an earlier age than boys (Brown et al., 1989, in press). Brown and her colleagues report that Blacks listen much more than whites, especially among females. Indeed, in their sample of 12-14 year olds, Black females were by far the most avid listeners, averaging about 7 hours a day with radio (Brown, Campbell & Fischer, 1986; Brown et al., 1989).

2. Preferences and tastes

To this point we have proceeded under two assumptions: first, that "popular music" is indeed popular among adolescents, that it is the prohibitive majority taste; second, that the phrase "popular music" describes a meaningful category. In this section we examine patterns of taste and preference, establishing in the process the first principle beyond any doubt, but casting considerable doubt on the second.

Well before the teen years most youth attend to music that most adults refer to as "popular" or "pop" or "rock." That is, their favorite songs are not classical, Dixieland, Broadway show tunes, etc., but are from that large class of music that is produced for, marketed to and largely consumed by American youth. Throughout childhood, interest in pop increases and interest in other types of music decreases; by 5th or 6th grade the general preference is for the former (Christenson, DeBenedittis &

Lindlof, 1985; Greer, Dorow & Randall, 1974).

The gravitation in middle to late grade school toward pop music is decidedly a mainstream transition. The preferred music is the "hot hits," the "top 40," essentially the songs that appear on commercial radio play-lists. After the age of 11 or 12 years, though, a trend toward elaboration and specification of tastes appears. Between early adolescence and college age, music taste becomes more differentiated, the audience more segmented. To be sure, "mainstream pop" never cease to be popular, but other types of music come to be defined, and strong, specific allegiances are formed. The current profusion of radio formats reflects this elaboration in tastes. A 1986 survey showed several radio music formats to be enjoyed "very much" by significant numbers of teens: Top 40 (62%) hard rock/Album Oriented Rock (32%); soft rock (24%); Black/R&B/Soul (17%); disco/Urban Contemporary (12%), and country/western (9%), with jazz, classical and "Easy Listening" all trailing behind ("Facts and Figures," 1986). The extent of the elaboration extends well beyond this list. Christenson and Peterson (1988) presented 26 music types to college students and found virtually all of the types to be familiar to 90% or more of the respondents.

Adolescence marks an increasing tendency to prefer and identify with particular music types (heavy metal, reggae, jazz, new wave, rap, etc.) and reject others. And these choices are not random or casual inclinations. They frequently describe and signify critical social and subcultural boundaries and

distinctions (Frith, 1981; Hebdige, 1979). Many youth employ music allegiance to define who they are in relation to peers, the school, and the broader society. More will be said later about music subcultures and the social meanings of music preference and allegiance. But it is important at the outset to correct the common assumption that the terms "rock" and "pop" adequately describe youth music. Even the teen who describes herself as a "pop" fan will be aware of and apply several distinctions within the motley family of music types that the outsider describes generically as rock or pop.

A few more age trends are worth noting. First, older teens identify their music tastes as "mainstream" less often than younger teens; that is, their favorites are less likely to be selected from the top hits. Indeed, many older students select music on the basis of unpopularity, or at least unfamiliarity. "Mainstream" becomes a pejorative term, a synonym for "uncool." No college freshman will admit to buying a Madonna album, even though almost all must own one. Logically, as Mainstream or Top 40 music loses its appeal for many, other genres emerge as more popular. Overall, compared to younger adolescents, older teens indicate more affinity for the harder-edged categories (hard rock, heavy metal, rap) and "progressive" rock (Tanner, 1981). This does not mean that these types ever become majority tastes; heavy metal, for instance, has always been the music of a devout minority. Nevertheless, it reflects the development in later adolescence of several, more sharply defined taste groups or

taste cultures.

Gender is intimately linked to music orientation. Numerous studies show that, in general, females are more attracted than males to Top-40, classical and Black-oriented music; males are more attracted than females to jazz, country/western, blues, progressive rock, and the harder forms of rock, i.e, what Simon Frith (1981) indelicately calls "cock rock" (Christenson & Peterson, 1988; Fox & Wince, 1975; Roe, 1984; Skipper, 1973; Tanner, 1981; Warner, 1984; Wober, 1984). Since the empirical studies on which these generalizations are based have tended to focus on youth over age 15, we do not know if these gender differences apply in early adolescence. We suspect, however, that gender differences in music preference become stronger with age, just as music tastes become more specific and more connected to social distinctions in the adolescent community, and as sex roles in general become more sharply defined.

Race and ethnicity are also important predictors of music taste, perhaps the most important (Denisoff, 1976). Several pop music genres are identified as primarily Black (soul, rap, R&B) or Hispanic (salsa, the "Miami Sound") in origin and appeal, and all forms of hard rock (including punk and heavy metal) are as definitely (if not as consciously) associated with white youth. What is surprising in the relationship between race/ethnicity and music preference is not these predictable associations but the considerable crossover interest that exists. For example, white students frequently express affinity for rap, and Black artists

often reach the top of the Billboard charts, a phenomenon that requires broad market support. Nor are minority tastes limited to minority-produced music, as indicated by the occasional appearance on Black music charts of such white artists as Hall and Oates, Madonna, and George Michael.

There is consistent evidence from older adolescents that socioeconomic status correlates with popular music taste. There seems to be greater elaboration and fragmentation of tastes in the middle class -- jazz, reggae, new wave, and progressive forms in general tend to elicit stronger followings among middle class than among lower income youth. Social background differences may depend on age. Tanner (1981) found that middle class junior high students were more likely than students from lower SES homes to cite a mainstream pop hit as a favorite. However, among senior high students, the relationship was reversed, with lower income students revealing more mainstream tastes than middle class. The reversal appears to be due to the abandonment of mainstream music by many of the middle class youths. Interestingly, contrary to the common notion that heavy metal music is a working class phenomenon, Tanner found no class differences in this taste.

Two tentative generalizations seem warranted. First, the age trend toward more elaborated, less mainstream music tastes appears to be largely a middle class phenomenon. Second, the development of an adolescent's music culture as a means for locating himself or herself in the larger social environment (especially the school environment) is largely a phenomenon of

later adolescence. That is, it is generally after grade school that music preference and allegiance function as a way to make us-them distinctions.

3. Motivations and gratifications

There are many uses for music, and many gratifications obtained from it. An abbreviated list for adolescents might include: relaxation or relief of tension; distraction from problems; filling time/relief of boredom; emotional elevation or expression; to provide company when alone; filling uncomfortable silence when with others; reflection on the meaning of lyrics; identification with or fantasizing about artists; to accompany group activities (parties, talking, playing); to provide a backdrop for romantic or dating activities (especially dancing); to provide a common content for conversation with friends; to get attention and/or approval from others; to form friendships; subcultural or "us-them" identification; social or other learning (new words and colloquial forms, how to respond in romantic encounters, how to think or feel about social issues, etc.); to provide a background for homework, household chores, or other tasks. The list could go on.

Indeed, most people, at certain times and in certain contexts, have probably used music for most of these reasons. But if music uses and gratifications are general in this sense, they are specific in other ways. First, they are not equally common: for instance, all age groups cite relaxation and mood

control more often than they mention social learning. Second, individuals differ in predictable ways in their reported music uses and gratifications: age, gender, race/ethnicity, social class and a variety of other background and psychological characteristics are related to music use. To illustrate, forty year old married couples use music less as a backdrop for dancing and partying than do 21 year old college students, females tend to pay more attention to lyrics than males (Frith, 1981; Gantz et al., 1978), and politically liberal students are less likely to characterize their listening as "in the background" than are conservative students (Christenson and Peterson, 1988).

Gantz and his colleagues (Gantz et al., 1978) asked junior high through college students how frequently several different uses applied to their listening. The results were, in descending order of frequency: passing the time/boredom relief (91% said they listened either "somewhat" or "very" frequently for this reason); relief of tension, or "taking my mind off things that are bothering me" (83%); mood control, or "getting or keeping me" in a certain mood (79%); relief of loneliness (67%); setting a mood when with other people (62%); thinking about the meaning of the lyrics (58%) and filling gaps in conversation (51%). Junior high students were less likely than older students to cite mood control and thinking about lyrics as frequent listening motivations. Rosenbaum and Prinsky (1987) presented a slightly different list of uses to 12-through 18-year-olds, asking why they liked/selected their favorite songs. They report, again in

descending order of importance, these gratifications: relaxation/taking mind off troubles, mood control, danceability, "The words express how I feel," control of social atmosphere, and passing the time.

Although these two studies differ in some ways, there is enough overlap to suggest that mood control and relaxation are primary motivators of music use, with social reasons (filling conversation gaps, setting atmosphere at social occasions) and lyric content somewhat less important. Indeed, the primacy of mood control, or the affective effect of music listening (including distraction from one's troubles) has been widely noted. When adolescents want to be in a certain mood, when they are lonely, when they want to forget their troubles, music tends to be the chosen medium (Brown, 1976; Christenson, DeBenedittis & Lindlof, 1985; Larson, Kubey & Colletti, 1989, in press; Lyle & Hoffman, 1972; Roe, 1985).

As previously noted, an exhaustive list of music gratifications would be quite long, perhaps unnecessarily so. Various uses, while distinct in some ways, overlap in others, suggesting that some boiling down of the complexity is possible. To that end, Roe (1985) reduced 12 uses-and-gratifications questions into three broad categories. In descending order of importance, they were: (1) atmosphere creation and mood control (including dancing, getting into the right mood, creates a good atmosphere when with others), (2) silence-filling and passing the time (helps to pass the time, makes time go faster when there's

nothing to do), and (3) attention to lyrics (they express how I feel, I want to listen to the words).

The relative unimportance of lyric content as a motivation for listening squares with the absence from most studies of any reference to learning or information-seeking as motivations for music use. This does not mean, however, that songs have no cognitive uses or informational significance. Even though lyric content is least important when one considers adolescents in general, it is important for many sub-groups. Furthermore, things can be learned even though learning is not a reason for exposure: we don't drive down the freeway in order to see billboards, but we see them and we acquire information from them.

Moreover, the importance of the informational function depends on the medium of delivery. Radio, which is often thought of in terms of its informational content (news, weather, advertising) as well as its musical content, is recognized by many listeners as providing informational gratifications. In one study, over a third of late grade schoolers mentioned some sort of information as a reason they liked listening to radio (Christenson & DeBenedittis, 1986).

The social uses and significance of music. Several previous references have been made to the social or subcultural meanings of music, its importance as an aid to peer group interactions, its use in group identity, and so on. Several scholars contend that, important as certain personal gratifications are, the social dimensions of music are most crucial to understanding its

niche in the lives of youth (Lull, 1987; Roe, 1984, 1985). By way of providing context, though, it should be noted that as much as 2/3 of music listening is solitary and personal (Christenson & DeBenedittis, 1986; Larson & Kubey, 1983): in fact, the quintessential music listening situation is alone in one's bedroom, and it is assuredly in that context that the crucial mood control function of music is usually fulfilled. Still, the social and subcultural dimensions of music use are important, and we now turn to them.

James Lull (1987) views social uses as occurring at several levels of social organization. In dyads, music is used to accompany dancing and courtship behavior; at the level of peer group, music lessens inhibitions, facilitates getting attention and approval, and provides topics for conversations. Music preference and orientation are also commonly used as criteria for forming impressions of other people and initiating friendships (see also Frith, 1981; Clarke, 1973). At yet a more diffuse level, music is used to delineate and identify with larger groups and subcultures, the largest of them being youth culture itself.

Unquestionably, early adolescents' increasing involvement with popular music is to some extent associated with their quest for independence from parents. But how much should be made of music's role in this quest? Some argue that music's essential meaning lies in its role in the battle between youth and their parents and, by extension, the adult mainstream and all it stands for. As James Lull puts it: "Generally, young people use music

to resist authority at all levels, assert their personalities and learn about things that their parents and the schools aren't telling them" (Lull, 1987, pg. 153). Grossberg (1984, 1987) makes an even stronger assertion of this ideological function, contending that the essential "work of music" is to provide a system for dividing the cultural world into Us and Them, for forming and maintaining what he calls "affective alliances." He views the primary (but by no means the only) such alliance as that of youth in opposition to the straight, boring, adult world; rock 'n' roll embodies for the youth alliance the concept of an oppositional state in which having fun and being free matter more than the things the adult world has to offer.

Yet, as noted earlier, current research on adolescent rebellion and the "generation gap" phenomenon calls into question how serious the gap really is. While accepting that some 14-year-olds crank up Motley Crüe at least partly to offend their parents, we question whether popular music really signifies, to adolescents themselves, their separation from or conflict with parents. A more moderate, revisionist position seems better able than a sturm und drang view to accommodate the fact that when asked why they listen to music or like a certain type of music, teens almost never mention that it accentuates their affiliation with other teenagers or expresses their conflictual relationship with their parents. To be sure, the fact that they don't volunteer this use of music doesn't mean it doesn't exist. But if music had the crucial ideological role so often referred to,

this role ought to have made at least a token appearance in the empirical research on music uses and gratifications.

Music can be related to "us-them" distinctions other than the one between youth and adult. Most crucially, perhaps, it helps to define the multiple peer cultures which develop in adolescent society, and which are acted out primarily in the school setting. B. Brown (1989) distinguishes between two types of peer groups. One is the "clique," the people one "hangs out" with. The other is the "crowd," a larger collective of similarly stereotyped individuals (individuals with the same "reputation") with whom one may or may not spend much time. He further notes the importance, especially in early adolescence, of finding one's niche in these kinds of peer groups. The function of music in forming and maintaining friendships which correspond to the level of the clique has already been mentioned. But in Brown's view, finding one's place in the crowd structure is in some ways even more important. To a great extent, one's crowd represents how one is viewed by others. Brown writes, "Adolescents do not select a crowd to join as much as they are thrust into one by virtue of their personality, background, interests, and reputation among peers" (B. Brown, 1989, pg. 20).

The evidence is that music style -- that is, a type of music and a personal style that goes with it -- is intimately related to the crowd structure in the school. The richest treatment of this issue comes from the work of British sociologist Simon Frith (1981), who studied teen subcultures in the industrial town of

Keighly. The key social distinction in the school was one familiar to the American scene -- that between college-bound students (the "6th formers") and working class youth headed for unskilled jobs (the "5th formers"). Frith observed sharp differences between the two groups in music preferences and uses. The college-bound crowd preferred "rock" to "pop" (indeed, the word "pop" was a pejorative to them just as the word "mainstream" is to middle-class American youths); they tended to buy albums rather than singles; they stressed the deep ideological meaning of music, its expression of individuality, its rebellion against convention. The working class students, in contrast, bought singles and stressed the beat and sound more than the messages in the lyrics. To them, music was less a statement about the world than an escape from it. Most important, these different orientations and styles did not simply exist, but were used actively by the students as a way of distinguishing peer groups from one another. To use Grossberg's terminology, they defined the "us" and the "not-us."

American school culture is in some ways less class-conscious than British, and it may be that the intense, music-based crowd structure that Frith found is culture-bound. There is evidence that it is not limited to Great Britain, however. Roe (1985) reports significant relationships among school achievement, peer group membership and music use among 11-15 year old Swedish students. His results also show a clear tendency over time for high achievers and those committed to school (even those from SES

backgrounds) to express greater liking for classical music and mainstream pop and less affinity for the socially disapproved forms of punk and rock. In his view, adolescents adjust their present values and styles to what they think their future status will be, and high involvement in certain teenage groups and music styles helps to provide a symbolic expression of alienation from the school.

Closer to home, Tanner (1981) reports an analysis of the relationships among music affiliation, social class, and commitment to school in a sample of Canadian high school students. His overall conclusion is that low commitment to school, in some ways an indication of where students think they are going after high school, is positively associated with a taste for the socially disapproved genre of heavy metal. Further, the tendency for disaffection with the school culture to be associated with this taste was much stronger among working class students than middle class students. He contends that working class kids who feel alienated from school culture and its mainstream values adopt a music identity that takes a "tough, aggressive, even violent stance" (Tanner, 1981, pg. 9). In both the working class and middle class groups, moreover, teenagers with a tendency toward delinquent behavior were more likely to adopt heavy metal as their music. Tanner sees this as a conscious choice, part of a "subcultural solution" to the task of peer group identity.

It is important to note that neither Tanner nor Roe see music as the cause of low commitment to school or of delinquency. Rather, music is seen as an important element in a subcultural style developed in response to such factors as one's position in the school hierarchy, one's social position, one's relationship to parents, and so forth. In other words, music does its work in concert with other factors.

Music and gender. Gender issues are at the very core of popular music. Popular music's involvement with male-female relationships is natural and not surprising, given adolescent preoccupations. Gender relationships -- romantic, sexual, or both -- have always dominated popular music lyrics (Horton, 1957; Carey, 1969; Rice, 1980), and a considerable amount of music listening is directly integrated into courtship activities such as dancing and partying (Frith, 1981; Lull, 1985, 1987).

We have already cited some of the gender differences in amount of listening and music taste. There are important differences in uses, too. For example, Gantz et al. (1978) found that girls were much more likely than boys to agree that the listed gratifications (mood control, reflecting on lyrics, setting a tone with others, etc.) applied to their use of music. The authors conclude that " popular music appears to be more functional for adolescent girls...than adolescent boys" (Gantz et al., 1978, pg. 85). Roe's (1987) finding that among Swedish teenagers girls were more likely than boys to agree with the statement "Music fits into my life" also supports this

conclusion. Roe also found girls to be more likely to pay attention to lyrics, to use music to cure loneliness, and to cite dancing as an important music use and danceability as a criterion of music selection. Similar differences have been reported elsewhere (Brake, 1980; Christenson & Peterson, 1988; Frith, 1981).

Mood control, the emotional impact of music, is important to both boys and girls. There is a hint, though, that the genders use music differently even here. Larson, Kubey and Colletti (1989) speculate, on the basis of an extensive study of teenagers' music use, that boys tend to use music that brings them "up" or energizes them, while girls are more likely to listen to music that allows them to ruminate on a current mood, even a somber one.

All these differences reflect the persistent differential socialization of males and females. As Bernice Lott has written: "In our place and time, young women are still encouraged to behave in ways our culture describes as 'feminine' -- to be observant and considerate of others, to attract the attentions of men and to seek approval" (Lott, 1987, pg. 69). This pattern probably helps explain the relative affinity among females for mainstream or pop music and males' corresponding preference for the harder, less socially accepted forms.

To say that the gender differences in music reflect other social processes, however, does not rule out the possibility that music may play a part in gender-role socialization, especially

concerning romantic relationships. Grade school aged children, particularly, may form early images of cross-sex relationships through their exposure to the messages and images in the music media. Our thinking about popular music should not simply take gender differences for granted; it must look to its possible role in perpetuating them.

B. Music Videos: Exposure and Gratifications

Although pictures have been put to music for many years, music videos are a recent phenomenon. It was only in 1981 that MTV, the music video network upon whose success the phenomenon has been based, was launched commercially. Today, MTV is joined by several music video cable channels plus a host of music video programs on general broadcast channels. Whether an adolescent has access to cable or not, he or she cannot be unaware of music videos. The genre has become a well-established American cultural form.

1. Frequency and amount of use

The vast majority of adolescents watch videos at least occasionally. Christenson, Begert, and Gunther (1989) found that 75% of a sample of 9- through 12-year-olds said "yes" when asked, "Do you ever watch music videos?" Their figure is reasonably close to the 80% of 12-through 14-year-olds who "ever watched" reported by Brown, Campbell and Fischer (1986), but higher estimates have been published (Stipp, 1985). The proportion of

adolescents who watch at least some music videos on a given day appears to be in the range of 35-40% (Brown, Campbell & Fisher, 1986; Sun & Lull, 1986). Music video viewing is generally less frequent than music listening (Christenson, Begert & Gunther, 1989).

Estimates of actual time spent viewing music videos vary considerably. The picture is blurred by inconsistencies among studies, including different data-gathering methods, ages of respondents, ethnic characteristics, geographical areas, and levels of cable penetration. Most published reports estimate the amount of music video use in early adolescence (ages 10-15) at around 15-20 minutes a day (Christenson, Begert & Gunther, 1989; Kubey & Larson, 1989; Leming, 1987; Wartella et al., 1989). The previously unreported data presented in Table 1 put music video viewing of California 7th graders at 40 minutes per day, of 9th graders at 30 minutes, and of 11th graders at 20 minutes. These results provide at least the suggestion that attention to music videos decreases somewhat during middle and late adolescence.

Sun and Lull (1986) have found daily viewing among a sample of 14-17 year olds to be much higher than the studies cited above -- in excess of 2 hours. The discrepancy between their estimates and others may reflect their older sample, but this explanation is called into question by the general absence of clear internal age trends in the various studies and the actual decrease with age in our previously unreported data. Kubey and Larson (1989), whose much lower estimate was based on using electronic pagers to

interrupt their respondents at regular time intervals, suggest that the self-report method used by Sun and Lull may account for much of the difference. They argue that students tend to over-report music video viewing because it is perceived as a "cool" thing to do. Yet two of the lower estimates come from self-reports of "usual" or "yesterday" viewing very similar to Sun and Lull's. We are inclined to accept the lower figures as the best for 10-15 year olds. As with music listening, though, the lack of agreement points out the critical need for national studies using consistent methodologies.

Gender differences in music video viewing appear to be slight, but where they have emerged, females watch more (Brown, Campbell & Fischer, 1986; Sun & Lull, 1986). Other things equal, of course, this would be predictable from their higher levels of music listening. The only significant relationship between race or ethnicity and viewing was the finding by Sun and Lull (1986) of especially high levels among Latinos.

2. Uses and gratifications

Based on a study of 10-12 year olds, Christenson, Begert and Gunther (1989) report three dominant early adolescent gratifications for watching music videos, each cited by about a third of their sample. First, many of the respondents mentioned the music content of MTV -- the songs, the beat, the "sound"-- as something they liked about it. Another frequently cited gratification was the visual imagery -- action, visual effects,

graphics. The third major category was the interpretation of the meaning of the song provided by the video. The primacy of these gratifications has been found in other studies as well (Brown, Campbell, & Fischer, 1986; Sun & Lull, 1986).

Adolescents watch music videos primarily for diversion and entertainment, rather than for mood control or social reasons. It is unclear to what extent information-seeking is an important motivation or gratification for music video viewing. When open-ended questions are employed (e.g., "What do you like about watching music videos?"), adolescents rarely volunteer a reason for viewing that has to do with learning (Christenson, Begert, & Gunther, 1989; Sun & Lull, 1986). On the other hand, when they are presented with learning as a reason and asked to rate the extent to which it applies to them, significant proportions agree that it does (Brown, Campbell, & Fisher, 1986). In any case, the information they seek has more to do with style and courtship behaviors (the latest fashions, how to dance) and popular music itself, than social relationships, moral values or "learning about the world" (Brown, Campbell & Fisher, 1986; Christenson, Begert & Gunther, 1989).

The research has not provided enough age comparisons to warrant firm conclusions concerning differences in uses and gratifications between early and later adolescents. It is known, however, that 10- to 12-year-olds feel that the sexual images, objectionable language and antisocial portrayals in videos may not be appropriate for their eyes and ears. Christenson, Begert

and Gunther (1989) asked kids in this age range if there was anything youngsters like them "shouldn't see" in music videos or whether there was anything they didn't like about videos. Fully half agreed there was, and by far the most common references were to sexual images and bad language. In fact, several respondents mentioned being offended by the "nudity" in MTV, which isn't even there. Though this study did not include later adolescents, one suspects that such misgivings would be less common among junior high and high school students.

Brown, Campbell and Fischer (1986) have reported significant gender and race differences in music video uses and gratifications. The gender differences are in line with those reported previously for music listening: that is, when differences did occur, the females indicated more agreement than males that certain gratifications applied to them, specifically in the areas of "trend surveillance" (dancing, fashion) and attention to lyrics. Blacks reported higher levels of identification than whites with several categories of use and gratification. Over half of the Blacks in the study said they watched music videos "a lot" to find out about style trends, compared to less than a third of the whites. Blacks were also significantly more likely to see music videos as a source of learning about the world (the authors refer to this as the "school of life"), to wish they were like the characters in music videos, and to use videos as a stimulus for social occasions. These results, taken with the gender and race differences already

reported, point to the conclusion that, in general, music media are more important and more functional for Black and female adolescents than whites and males.

IV: MESSAGES, INTERPRETATION, AND EFFECTS

The major concern of this section is the impact of music media on the knowledge, attitudes and behavior of early adolescents. Before any discussion of impact may occur, however, it is essential to engage two critical questions. First, what is the content of the music media -- that is, what are the apparent messages for adolescents? Second, how are such messages likely to be received and processed -- that is, what are the interpreted messages? As we will see, these two questions may arrive at quite different answers.

A. The Content of the Music Media

Much of the current debate over the impact of the music media stems from concern about their most offensive messages and portrayals. There are many references in music and music videos to sex, Satanism, drug use, suicide, violence and destruction. And, without question, the thrust of some of this content is to glorify (or at least not to condemn) the antisocial or risky behaviors depicted. There are, in short, many songs and videos that take a rebellious stance, violate common cultural norms and challenge adult authority.

There are many critics of these messages, but the best known is certainly the Parents Music Resource Center (PMRC), who have lobbied with some success for a system of record ratings akin to the ratings system in use for motion pictures. Their point of view, as expressed by the group's executive director, Jennifer Norwood, is this:

> With albums depicting Satanic ritual how-to's, the joy of rape, murder, sado-masochism and every other form of violence known to man; and knowing that the market for albums such as these seems to be exclusively pre-teens and adolescents, we feel that the influence of these materials needs to be addressed (Norwood, 1987, pg. 91).

The PMRC is not alone in its expression of shock and dismay at the content of music media. Other prominent organizations (e.g., the American Academy of Pediatrics, the PTA) and innumerable individuals have spoken out on the issue. It would be possible to cite here literally hundreds of articles and editorials expressing the same concern. It is important, though, to consider just how prevalent such messages are and to what extent the dire characterizations referred to above apply to the music consumed by most adolescents.

Those who have looked most closely and systematically at broad samples of popular music have tended to conclude that, by and large, the thematic content of most music is mainstream in its value orientation. Ever since the days when rock was young, most lyrics have dealt with some aspect of romantic love (cf. Christenson & Lindlof, 1983; Rice, 1976; Fedler, Hall & Tanzi, 1982). To be sure, the treatment of love is less optimistic and

romantic than it once was (Rice, 1976), and the stress on the physical, as opposed to the emotional, aspects of relationships has increased markedly (Fedler, Hall & Tanzi, 1982).

However, even today most portrayals of romantic or sexual relationships are in line with traditional notions of moral conduct. Leming (1987) points out, for instance, that when the morally "offensive" (or, in health terms, potentially risky) behavior of casual sex is depicted in popular music, it is generally treated as an avenue to unhappiness, not as a positive solution to life's problems. More generally, he challenges the notion that popular music has a strong countercultural thrust, pointing out that teenagers themselves are much more conservative and less rebellious than they are often felt to be and that the music they consume will naturally reflect this conservatism. That most music, especially mainstream music, should stop short of any radical critique of the culture is not surprising in view of the fact that it is, in the end, a business like any other, hence has no real interest in leveling serious challenges at the social system that supports it (Brake, 1980).

Ironically, where music is relatively non-traditional, it is so in a way many critics might applaud. In the area of gender-role portrayals, specifically, the evidence is that while stereotyping certainly exists, the embedded values are somewhat less rigid than in other popular media. Content analyses of music lyrics have found men to be portrayed in ways often associated stereotypically with females; that is, males are shown

crying more often than females, as being more likely to be left by a lover, as being more submissive than females. And females are shown as being at least as active and powerful in relationships (Hyden & McCandless, 1983; Wilkinson, 1976).

To say, however, that most music is relatively inoffensive thematically, or fairly traditional in its working out of moral values, is not to exhaust the content issue. First, even in a song in which casual sex is portrayed as an avenue to unhappiness there may still be offensive language or other negative imagery. That is, the overall narrative may be in accord with traditional values while its constituent parts operate at a different level. After all, the casual sex is there. Second, values are not the only thing in lyrics: there is a lot of simple behavioral description, too, and this obviously counts as content. In this regard, Christenson and Lindlof (1983) have written:

> ...there is more "information" in popular music lyrics than global categories reveal. Lyrics tell stories about people as they meet, exchange glances, fall in love, as they encounter problems and cope with them, and so on. There is a great deal of specific information about how to feel and act, not only in love but in a variety of situations (Christenson & Lindlof, 1983, pg. 34).

Furthermore, to say that music as a whole is reasonably traditional (or acceptable to adult authorities) is not to say that there aren't genres that are strongly rebellious, violent, sexist, and so on. In fact, the critics are really concerned about heavy metal and rap, not so much about mainstream pop. Those two genres are much more heavily laced with violent and sexual imagery than mainstream pop, and clearly their devotees

will receive a relatively heavy dose of the objectionable stuff.

Music videos add the visual dimension to music, and so the amount of information in them that can be observed and perhaps learned from is correspondingly much greater. In fact, there is fully as much concern expressed over the visual portrayals on MTV as the nasty words on heavy metal records, and because of the vividness of their visual imagery, they have stimulated a number of detailed content analyses over the brief history of the genre.

Violence in some form occurs in somewhat over half of all music videos, with hand-to-hand combat (wrestling, punching, grabbing) the most common. As one might expect given that males are the central figures in most videos, they are also the ones most likely to commit violence and to be victimized by it (Sherman & Dominick, 1986). Portrayals of some sort of sexual intimacy appear in about three-quarters of all videos, but the images are more implied than explicit, consisting largely of non-intimate touching and flirtation. There is virtually no taboo or deviant sexual behavior (Sherman & Dominick, 1986).

In terms of racial differences, Brown and Campbell (1986) report that MTV videos (directed to a primarily white market) contained considerably more antisocial activity and were more negative generally than Black-oriented videos. MTV also played more videos with social protest themes (about a quarter had such a theme versus about 10% of the Black-oriented ones).

With videos as with music lyrics, the distinction needs to be drawn between the complete narrative and the bits and pieces

of information embedded in it. In videos especially, the narrative structure can be quite confusing or dreamlike: indeed, the visuals often have little to do with the lyrics. Aufderheide (1986) describes music videos as "distinctive because they imitate dreams or manufactured fantasies rather than the event structure of bounded programs" (pg. 65). Music videos are not television plus music, but a distinct form, one of the main features of which is a non-linear, impressionistic, indeed, non-narrative format.

On the other hand, videos, like lyrics, contain many discrete (if not discreet) segments, images, vignettes, encounters, and so on. The available content analyses have not explicitly dealt with depictions of health-related behaviors, and future research is clearly needed in this area. It is worth noting, though, that videos do one important thing that music can't, that is, provide <u>pictures</u> of people. And the people tend to be glamorous, thin, and extremely well-dressed. In many ways, MTV is a style show, each frame a page from a fashion magazine, with the strong implication, one suspects, that this is how the good and beautiful people of the world ought to look and act. It may well be that these concrete images carry as many implications as the values or lessons embedded deeply (and abstrusely) in the total narrative.

B. Comprehension and Processing

Obviously, whether a song influences attitudes, values, or behavior depends on what sense the listener makes of it. If Madonna's "Papa Don't Preach" is to function as the "commercial for teenage pregnancy" that columnist Ellen Goodman (1986) claims, teenagers must understand the song as being about, indeed advocating, teenage sexual activity. Moreover, if they truly are to be influenced, they need to connect whatever meaning they give the song to their own lives. To what extent does this occur? What do we know about how adolescents process and understand music and music videos?

A substantial literature indicates that youth interpret television shows differently depending on such factors as age, gender, cognitive development, and a variety of background variables such as socioeconomic status, race and ethnicity, and religiosity (e.g., Anderson & Collins, 1988; Collins, 1983; Hawkins & Pingree, 1986; Roberts, 1971, 1973). Similar findings have appeared for music media only recently.

Generally, adolescent understanding of music is approached in one of three ways. Some studies compare children's and/or teenagers' understanding of songs with the (presumably) definitive interpretation of the "expert" adults doing the research. Another approach compares the meanings imputed to a song by one group of listeners to those of another group -- e.g., adults vs. children, younger vs. older adolescents, Black vs. white teenagers. Yet other studies simply attempt to describe

the various ways listeners process or think about the music lyrics or videos, without comparison to a criterion. Such research, for example, might look at the number of inferences teenagers make while listening, or at the differences in amount of imaginative responses elicited by a record versus a music video of the same song.

The first approach commonly finds that many children and adolescents do not "correctly" comprehend lyrics. For example, Greenfield and her colleagues (1987) tested fourth, eighth, twelfth grade and college students' understanding of the themes in Bruce Springsteen's "Born in the U.S.A." and Madonna's "Like a Virgin." Comprehension of specific points was quite low: for instance, only 10% of the 4th graders and 50% of the 12th graders understood the "yellow man" in Springsteen's song to be a North Vietnamese soldier. Understanding of the overall messages was even lower. In response to the question "What is the general feeling Bruce Springsteen has about living in the USA," no fourth grader, fewer than half the eighth and twelfth graders, and barely 50% of the college students understood that the song expressed "despair, disillusionment and resentment." Most other studies taking this approach report similarly low proportions of music lyric comprehension (Denisoff & Levine, 1971; Leming, 1987; Robinson & Hirsch, 1969; Rosenbaum & Prinsky, 1987).

It is important to note, however, that in each of these studies the judgment of what constitutes "correct" comprehension depends on somebody defining the "meaning" in the first place.

This assumes that songs have a single, manifest meaning and that the adult investigator recognizes what it is. Moreover, studies of this type seldom describe "incorrect" interpretations, leaving entirely open the interesting question of what sense "incorrect" listeners might have made of the message. What this line of research repeatedly demonstrates is that music and music videos often do not mean the same thing to children or adolescents that they mean to adults.

Studies that compare responses of different, pre-defined groups of youth seldom, if ever, find 51% concurrence on any answers, correct or incorrect. Typically, there are crucial differences in the meanings that different subsets of listeners impute to songs. For example, Brown and Schulze (1989) compared various adult commentators' readings of certain Madonna music videos ("Papa Don't Preach" and "Open Your Heart") with each other and with those of different segments of college students. They found large variations in what the adults saw in the videos. Planned Parenthood, for instance, characterized "Papa" as a message about the "glamor of sex, pregnancy and childbearing," while one "pro-life" group saw it as advocating alternatives to abortion. Such variation emphasizes our earlier warning about assuming a single, correct meaning.

College students' responses were just as disparate, but were also related to gender and race. White males and females saw the video as dealing mainly with teenage pregnancy. However, many Black females and most Black males were more likely to interpret

it in terms of boy-girl or father-daughter relationships. Brown and Schulze attribute this difference to the economic and social realities of current U.S. Black society:

> Black adolescents may not see teenaged, unmarried pregnancy as the "trouble" most whites think it is. The focus of the Black viewers instead on the boy/girl and father/daughter relationships may reflect the currently more problematic nature of establishing lasting cross-sex relationships in Black society (pg. 14).

Similar differences were found in interpretations of "Open Your Heart." Almost half of the whites saw this video, which is presented in a peep show setting, as concerned with pornography, sexual perversion and women as sexual objects. Fewer than a quarter of the Blacks interpreted it this way. Rather, they saw it as dealing with such issues as love or working women. Obviously, fundamental differences in the backgrounds, concerns and needs of the students made significant differences in how they read the song. There were also differences in interpretations of the songs within both racial and gender groups. Among whites, males were more likely than females to find no clear theme in the song (50% to 29%); among Blacks, females expressed more disapproval of Madonna's dance and costume than did males (63% to 27%).

Christenson (1989) obtained similar results when comparing pre-adolescents' and early adolescents' responses to a Billy Ocean music video ("Get Outta My Dreams, Get Into My Car"). Not only did just 51% of the nine- through twelve-year-olds he interviewed mention any kind of romantic attraction or

relationship (some even interpreted it as a song about a man and his car), but there were systematic differences in how the older and younger children responded. Twelve-year-olds made sense of the song in terms of its abstract focus on the relationship between a man and a woman ("It's about a guy who likes a girl and wants to know her better"). Younger children tended to focus on concrete events and details ("It's about a guy who wants to take a girl for a ride in his car"). Since the years nine through twelve locate the period during which children move from concrete cognitive operations, in which the tendency is to focus on concrete details and the relationships between concrete facts, to formal operations, which is associated with an increasing ability to deal with abstractions and the relationship between relationships (cf. Flavell, 1977), these findings suggest that differences in cognitive development as well as social background may produce differences in how children interpret the messages of music media, even <u>within</u> the period of early adolescence.

An ethnographic study of 11-15 year old girls shows similar differences in use and interpretation of media and media content, particularly as it relates to sexual values (Brown, Nikopoulou, Childers, Waszak & Deiter, 1988). In our view, this work shows that girls in different stages of dealing with the issues of cross-sex and sexual relations process media content quite differently. It also supports our earlier contention that girls of the same age, race, and socioeconomic status may deal with those issues at different times. In other words, an important

dimension on which to differentiate adolescents is defined by when they deal with the key issues of adolescent development.

Clearly, then, youngsters vary greatly in the readings they give to the same music messages. This is not to say, however, that comprehension is random. In all of the studies, many listeners have concurred on certain interpretations. Nor does it mean that we shouldn't be concerned about teenagers' understanding of the various sexually explicit, violent, or suicidal lyrics that elicit comment from adult critics. Obviously, some young teenagers do apprehend some songs in these terms, at least some of the time. Indeed, substantial proportions of children as young as nine years express awareness of just those "naughtier" aspects of music videos that concern adults the most (Christenson, Begert, & Gunther, 1989; also see Leming, 1987). And there is reason to suspect that the youngsters most likely to comprehend the more horrific lyrics in terms of their manifest content might be just those who are more at risk. If adolescents' interpretation of information is sensitive to current needs and activities, one might expect those who are becoming sexually active to be most likely to concentrate on the sexual content of lyrics, those who are considering experimenting with drugs may be most likely to attend to drug-oriented lyrics, those who are highly alienated or depressed to be most likely to focus on songs about suicide.

The few studies that take the third approach mentioned above, that is, examining how adolescents process songs (as

opposed to the specific meanings they read into them) validate this concern. These studies also find differences between groups. Thompson, Pingree, Hawkins, and Draves (1989), for example, showed high school freshmen through seniors the "Papa Don't Preach" video, and asked them (1) how much the video made them draw inferences specific to the narrative (eg., "What will happen to the girl in the future?"), and (2) how much the video stimulated the drawing of personal connections to the narrative (eg., "How would your father react if you were in the girl's or boy's place?"). The results are complex, but it is clear that teenagers with different prior experiences processed the video in quite different ways. For example, girls whose fathers stressed the importance of social harmony in interpersonal relations made more personal connections between the song and themselves than did girls whose fathers stressed the importance of exploring ideas at the possible expense of social harmony. Apparently, the father-daughter conflict portrayed in the music video was most likely to trigger personal responses among girls whose fathers valued avoidance of such conflict.

Similarly, in keeping with our point that new messages are processed as a function of earlier experience, girls who reported prior "pregnancy experiences" (e.g., had been pregnant, had a pregnancy scare, or had a friend who had been pregnant) were more likely than others to connect the video narrative to their own lives, both in terms of the amount of effort they expended and the sheer number of connections they made. Clearly, the personal

experiences and family relationships of young teens not only make a difference in the meaning they read into a song or video, but also affect how they process or think about that meaning. Prior experiences may also operate to make just those adolescents most at risk the most sensitive to problematic messages.

Processing differences also depend on whether the song is presented aurally or audiovisually. In some cases, the visual component of the music video serves to clarify the meaning of a song. Often, though, it introduces confusion, and sometimes it may introduce images that highlight "meanings" not obvious in the lyric alone (Christenson, Begert & Gunther, 1989). Moreover, many of the young adolescents in this study were emphatic in their statements that music <u>videos</u> frequently contain imagery they consider taboo -- sexual content, bad language, drugs, alcohol, violence, and so on. Such criticisms are seldom voiced about song lyrics.

The overarching sense of the research on how children and young adolescents process and comprehend the music media, then, is that variation in response is the rule. Regardless of how the question is approached, the studies consistently demonstrate that (a) different youth process music in different ways, and (b) it is possible to explain much of the variation on the basis of psychological, social, and developmental differences. The action of these kinds of variables, alone and in tandem, must be considered in any theory of music media interpretation or impact.

C. Music Media Effects

Most popular discussions of the effects of music media focus on the content of song lyrics or the images in music videos. The concern is that youth may incorporate these depictions of the world into their own beliefs, values and behavior. Obviously, this is one of the more important potential consequences of exposure to all mass media -- the possibility that their messages will change the way in which an individual thinks and acts in the world. We will pay considerable attention to such issues in this section, as well as several other important consequences of adolescent attention to music media. In order, we examine the impact of music media on: time, academic achievement, affective states, social interaction, and social learning and health.

1. Time

Music media clearly affect adolescents' allocation of time. Our review of amount of listening shows that children and teens devote significant chunks of their waking hours to music. Whether such an effect is of concern, of course, depends on whether time spent with music displaces time devoted to other activities, and, if so, how much those other activities are valued. For example, were music media shown to reduce time devoted to schoolwork, we would probably infer a negative effect. Conversely, if music listening displaced time spent hanging around in pool halls, we might infer a positive effect.

We have located no studies examining the displacement impact of music media. However, recent work on children's and adolescents' use of television finds little evidence that TV takes much time away from schoolwork or other valued non-media activities, though it does affect movie attendance and radio listening (cf. Mutz, Roberts, & Van Vuuren, 1988; Ritchie, Price & Roberts, 1987). Since most music media function more easily than television as background or secondary activities (music video may be the exception), there is even less reason to expect listening to displace time spent on non-media activities. It is far more likely that music listening and other activities will be engaged in concurrently, that music will accompany homework, household chores or talking with friends.

2. Academic performance

If music listening does not displace time spent on school work, perhaps it interferes with academic performance by reducing concentration or comprehension. Many adolescents use music as a backdrop for study. In fact, our unpublished data from California teenagers indicate that doing homework without music is the exception: fewer than 10% of our 7th through 11th graders said they "never" study with music. Over half said they did so either "often" or "always."

Given the long history of concern that mass media negatively affect aspects of the school experience (cf. Roberts & Rockman, in press; Roe, 1987), the lack of research focusing directly on

music listening's impact on studying is surprising. Some correlational work points to a relationship between listening and academic performance. Larson and Kubey (1983), for example, report that although amount of listening is not related to academic aptitude, teens who listen more spend less time in class and have lower levels of academic performance. Burke and Grinder (1966) found an inverse relationship between the amount of time 13-17 year olds spent listening to "youth culture music" and their grade point averages, hours of study per week, and academic aspirations. Finally, Sun and Lull (1986) found that time spent viewing music videos was negatively related to "contentment with school."

We must caution that these studies provide no basis on which to infer that music media attendance causes decrements in academic performance. It is at least as likely that poor school performance engenders increased attention to popular music (listening is certainly more rewarding than struggling with a subject in which one does not do well). It is also possible that some third factor influences both listening and academic performance (e.g., a teen's peer group might exert pressures to listen more and to study less (see Roe, 1987).

We have located a single experiment that allows causal inferences about the impact of rock music on academic performance. LaVoie and Collins (1975) had 9th through 12th graders study various topics (literature, mathematics, physical science, social science) in a classroom setting for 30 minutes,

either in silence or while listening to rock or to classical music. They tested for comprehension immediately, a day later, and three days later. Regardless of subject matter, students who studied with rock music scored significantly lower than those in either of the other two conditions. Lavoie and Collins speculate that because rock is an integral part of youth culture, students were more interested in listening or less able to "block out" the music and focus on the academic content. In any case, rock music interfered with learning. Although we advise caution in generalizing these results (for instance, we suspect that the atypicality of encountering rock music in a group setting in the classroom may have affected attention), this study points to the very real possibility that teenagers' attempts to process rock or pop music and school content simultaneously may lead to conditions of information overload, interference or attention decrements, any of which could reduce academic performance.

3. Mood and affect

Earlier we showed that many adolescents use music media for affective reasons -- to express or change mood states (to relax, to relieve tension, to escape worries, for excitement, when they are sad, lonely, bored). Our unpublished data confirm this picture: when directly asked whether the statement "I listen to music to change my mood" applied to them, over 50% of the California sample 7th and 9th graders and almost 70% of 11th graders replied "somewhat" or "a lot."

Assuming that such self-reports are accurate, it seems reasonable to infer that both mood maintenance and mood change are legitimate, direct, and probably immediate, effects of listening. There is, however, a lack of direct experimental evidence on this point. Clinical studies indicate that some kinds of music may have positive emotional effects on disturbed listeners (Cripe, 1986; McGunigle-Reardon & Bell, 1975), but popular and rock music seldom serve as a treatment in such studies. Other clinicians (Heimlich, 1983; Mark, 1988) report that rock lyrics may stimulate alienated or otherwise disturbed adolescents to communicate more openly. However, we have found no studies that directly assess the affective consequences among normal populations of youth. Larson and Kubey (1983) did find an association between pop music listening occasions and elevated mood states among early adolescent boys, but whether listening serves as cause or effect remains a question. Still, casual observation seems to confirm that rock and pop can animate and delight teenagers.

If music has the power to elevate, it may also have the power to depress, or at least accentuate depressive states. Recent reports of teen suicides associated with listening to certain heavy metal songs (Christianity Today, 1988; The Economist, 1988) raises important questions about whether some music does not worsen the mood of some adolescents. Clearly, this is an important health effect that deserves further study.

4. Social interaction

Popular music has much of its impact in social settings. Each of the social uses to which we referred in Section III corresponds to an effect of music. That is, if music is used to provide a party atmosphere, it presumably has that effect; if it is used for dancing, it obviously "causes" dancing; if music allegiance is used to define subgroups within the school culture, it probably functions in that way -- otherwise, something else would be used. To anybody who doubts the power of music to influence adolescents' social behavior, we recommend a simple experiment: unplug the stereo at a party.

Such effects are not generally seen as much cause for concern. By and large, they are neutral or even positive outcomes -- in these ways, music makes life better for adolescents. Yet we have hinted at some areas in which the impact of music in social settings and social groups might be problematic. Certain types of music do stand for rebellion and alienation, do represent antisocial philosophies. There is the possibility that the message of this kind of music (which is as much in the sound and the images of the artists as in the lyrics) may solidify certain subgroups in adolescent culture and articulate values and feelings for their members.

We say <u>certain</u> subgroups because most teens who listen, for example, to heavy metal are not alienated or at risk. Most probably fit reasonably well into their schools and families. For them, heavy metal is a taste, perhaps offensive to parents,

but otherwise not much to worry about. For others, though, the preference for heavy metal is more than just a "taste." It is an identity, a source of group cohesion, a life philosophy. For these listeners, there is the strong possibility that a certain type of music, once adopted by their group, may begin to act as a source of information, values, even behavior.

Unfortunately, we have no direct evidence on whether this sort of process occurs. Music use and preference are usually treated as outcome variables, as the results of other social processes. The single strongest piece of evidence that music can act as a cause of adolescent peer group processes comes from Roe's (1984) longitudinal study of Swedish youth and music. He found that early adopters of pop music -- those strongly interested in it at age 11 -- were later more oriented toward peers (and less toward parents) than those who were not interested in pop at an early age. His statistical analyses allowed him to conclude that it was the differences in popular music involvement at an early age that caused the later differences in peer orientation. While Roe's study is somewhat removed from our earlier speculation, it does suggest that music can have deep, structural effects on social relationships in adolescence. In view of music's central place in teen group settings, its potential to operate on individuals through group processes warrants further attention.

5. Social learning

We have already seen that children and adolescents do not describe information-seeking as an important motivation of music media use (well over 80% of the teenagers in the unpublished California study said they seldom or never listened to "learn about life"). Nevertheless, things can and will be learned from music media even if learning is not the primary reason for exposure. The rapid diffusion of a new hair or clothing style following their introduction in a new music video and the incorporation of a new expression into an adolescent's language after the release of a new song both attest to that fact. The question is: Which children under what kinds of conditions learn what kinds of things?

Research has examined differences in children's and young adolescents' responses to intended and unintended television messages (Blosser & Roberts, 1985; Roberts, 1982; for reviews see Bandura, 1989; Roberts & Maccoby, 1985). Oversimplifying greatly, the primary differences reside in the much lower probability that information presented in an entertainment context (a "disinterested" informational context) will be defended against. In other words, when youngsters seek entertainment, they are less likely to evaluate content in terms of its credibility, personal applicability, and congruence with existing belief systems. This uncritical posture underlies most adult concern with the potential impact of entertainment content. In a sense, concern with the effects of violence on TV or sex in

popular song lyrics and music videos is little more than a reprise of Plato's concern with the "stories" available to the youth in his Republic.

Given the human tendency to pay more attention to deviant and/or unusual messages than to normative information, and the tendency of some rock music lyrics and videos to focus on -- even laud -- such behaviors as premarital sex, drug use, violence, and suicide, it is logical that most public attention to music would emphasize negative effects. Unfortunately, there is little research that addresses whether rock music does, in fact, produce the kinds of dire consequences we hear so much about.

When asked very general questions, young adolescents say that they sometimes get ideas or information from music lyrics. Leming (1987) found that about half of a small sample of academically talented 11-15 year olds from rural backgrounds said that music had influenced the way they thought about "an important topic." Unfortunately, Leming does not report what topics or the nature of the influence on their thinking. He does report, however, that over 70% of his sample claimed that they had rejected song messages that seemed to condone casual or free sex. Wass and others (1988-89) report similar kinds of findings.

Of course, Leming's sample of talented teens is just the kind of subgroup we might expect to reject counter-normative messages. What about teenagers who fall into "at-risk" subgroups? One of the few empirical studies addressing this issue found that young adolescents who were alienated from

mainstream school life expressed a preference for heavy metal rock, a music type that reflected their own alienation (Tanner, 1981). If one is looking for first causes, it is at least as likely that alienation leads to a preference for heavy metal as the reverse. However, we also need to note that students who are alienated from the majority school culture are an at-risk group which might be particularly responsive to the kinds of rebellious, anti-establishment lyrics typical of much heavy metal music. Regardless of why they initially develop an allegiance to this kind of music, the needs leading to this allegiance are just those which might lead them to find in the music a justification for their dissatisfaction with the norm. For them, the music may provide a concrete expression of a negative philosophy. King's (1988) finding that over 60% of a sample of chemically dependent adolescents expressed preference for heavy metal music is similarly disturbing, because this, too, is an at-risk subsample which might be particularly responsive to and influenced by heavy metal themes. But we reiterate that this is purely a possibility; we have not found evidence testing this hypothesis.

Greeson and Williams (1986) report the only study we have identified which enables even tentative causal inferences about social learning from music media, in this case music videos. They showed music videos to small numbers of middle income 7th and 10th graders. Half the students in each grade saw thirty minutes of videos randomly recorded off MTV; half saw a "high impact" stimulus composed of videos selected especially for their

reference to sex, violence, and anti-establishment themes. Half of each of these groups completed a questionnaire prior to viewing and half after viewing. Teenagers questioned after viewing less than an hour of MTV were more likely to approve of premarital sex than those questioned prior to viewing. The high impact videos appeared to reduce disapproval of violence among the 10th graders (but not the 7th graders). Finally, there was no effect on attitudes toward drug use, probably because few music videos deal overtly with this issue. This is the only study focusing on music media that tests hypotheses and produces findings that converge with the large literature on social learning in the area of television and children. Its results are quite similar to findings reported in many studies of children's and adolescents' learning from television content intended to entertain (Comstock et al., 1978; Pearl, Bouthilet & Lazar, 1982).

In summary, it appears that when children are interviewed after exposure to media of any kind, they consistently show that they learn, and their attitudes often change in the direction of what they have seen, read, or heard. How long such attitudes might last, and the degree to which they guide subsequent behavior, however, remain at issue.

Health messages. When we turn to music media messages designed with the intent of influencing children and young adolescents, we find that there is very little empirical research on the topic, and that what few studies do exist deal entirely

with health issues. The health emphasis probably reflects growing awareness that adolescence locates a particularly critical period of risk in a number of health-related areas (see, for example, Flora & Thoresen, 1988; Horowitz et al., 1989; Hamburg & Takanishi, 1989; Kean, 1989; Millstein, 1989).

There are several reports of "formative" evaluations of music messages produced to prevent teenagers from beginning to smoke (Bettinghaus, 1988; Bauman et al., 1988; Bauman, Padgett & Moch, 1989). These focus on how messages were formulated rather than on their effectiveness once broadcast. For instance, Bauman et al. (1988) describe procedures used to select the kinds of messages they ultimately employed (e.g., avoid a negative approach) and the kinds of sources for those messages (e.g., avoid deviant-appearing teenagers, focus on normative teen-age sources a year or two older than the target audience).

Bauman, Padgett and Koch (1989) report one of two examinations of the effectiveness of such a public service campaign. Their review of theory and research on using media to promote health behaviors suggested that they should use radio and television spots to encourage adolescent interpersonal communication about not smoking. They developed a series of spots inviting teenage listeners (ages 12-15 years) to enter a sweepstakes with the chance of winning $1000, then recruited those who entered and offered them for nominating and contacting three friends about not smoking. The sweepstakes offer was then extended to the nominated friends who were also offered the

chance of winning if they contacted an additional three teenagers. About 0.5% of the population of teenagers reached directly by the broadcast entered the sweepstakes. The likelihood of entering was doubled in locales that combined radio and TV spots, as opposed to those that used radio only. More encouraging is the finding that using media to promote interpersonal contact can have a multiplying effect. That is, direct mail contact with the friends who were named in response to the original broadcast, and with the adolescents that the friends nominated, ultimately resulted in the recruitment of over 18% of the target audience. It was also found that whites, females, younger adolescents and those who expressed the intention of not smoking were more likely to participate.

There was no evidence that the young teenagers who were the focus of this study changed their smoking attitudes or behavior as a result of participation. However, the design of the study was such that it would be difficult to demonstrate behavioral change. For one thing, the messages were broadcast as part of a larger campaign in the same geographical area -- possibly that campaign masked the effects of the interpersonal approach.

Finally, Singhal and Rogers (1989) describe an imaginative and creative program in which the U.S. Agency for International Development funded a competition among song writers challenging them to write a popular song aimed at promoting sexual abstinence among Latin American teenagers. The winning song was produced as a record, and ultimately a music video, starring two of Latin

America's most popular adolescent recording artists. The song, "When We Are Together," articulates a theme of "waiting," of postponing sex until after marriage. Numerous broadcast and print-based public service announcements publicized the song, Latin American broadcast organizations were invited to play the song at no fee, and Johnny and Tatiana, the two recording stars, made many media and personal appearances to promote the song and its theme. The upshot was a massive amount of free broadcast time and a record that sailed to the top of the charts all across Latin America.

Singhal and Rogers discuss several consequences of this effort. First, they note that teenagers were encouraged to talk more openly and freely about sex-related issues. Second, they claim the song served to reinforce teenagers who had previously decided to use restraint. Third, they state that it served to sensitize younger teenagers to the importance of the topic. Finally, they report that the song helped in attempts to disseminate information about contraceptives. Unfortunately, they do not describe how information supporting these outcomes was obtained. Moreover, there are not data directly assessing whether the song had any impact on teen sexual interaction, teen pregnancy, or any other concrete indicator of effectiveness.

Efforts of this type, as well as those initiated by the Rock Against Drugs Foundation (Rock Against Drugs, 1988) offer one of the more promising avenues for using music media to promote more healthy behaviors among teenagers. However, empirical studies

addressing the kinds of questions raised in the preceding pages are largely absent. Beyond reports of music media use and processing, there is far too little in the research literature on questions of impact, health or otherwise.

V: POLICY AND RESEARCH RECOMMENDATIONS

The following recommendations are offered as highly tentative suggestions. Since they spring largely from the previous discussion, they are presented with only brief elaboration and justification (for a review of research on health promotion intervention and mass media, see Flora, Maibach & Maccoby, 1989). We begin with policy recommendations because, in light of the many health risks facing today's adolescents, we cannot afford to wait until all the recommended research is completed. It is important to note, however, that one of our primary policy recommendations <u>is</u> research. There are many gaps in our knowledge of the uses and effects of music media, gaps which are especially daunting in the area of adolescent health issues. The most effective policy decisions will come only after these gaps are filled.

A. Policy Recommendations

Concerning the use of the music media to promote the health and well-being of adolescents, we recommend that:

1. The Federal Communication reinstate and vigorously enforce public service responsibilities for radio broadcasters.

Since teens spend so much time listening to the radio, Public Service Announcements (PSAs) offer a potentially effective means to reach them with health messages. Currently, however, the only way to guarantee any airing of such messages, let alone airing at times when the target audience is most likely to be listening, is to buy time. Many sponsors of public service announcements cannot buy time; many will not. Furthermore, our interviews with radio station personnel indicate that, in the absence of FCC requirements, anything "controversial" (e.g., strongly worded or concerned with issues that might elicit objections from some sections of the audience) is unlikely to receive air play. We believe that broadcasters have a deeper responsibility in this area than they have shown themselves willing to accept voluntarily.

2-A. Rather than attempt to use PSAs to provide complex information or to change attitudes, producers (i.e., NIH, the Carnegie Council on Adolescence, the National PTA) should use radio announcements to link teenagers to additional, supplementary sources of information and assistance.

Even if public service air time is purchased or mandated by FCC regulation, any given PSA (and/or set of PSAs on any given issue) appears infrequently and irregularly. Since PSAs tend to be brief, embedded within a number of competing announcements, and entirely aural, expecting them to provide complex information or an adequate number of convincing arguments to change attitudes is a mistake. However, PSAs can provide brief, simple messages that will direct listeners to further information or assistance <u>when it is needed</u>, hence when it is most likely to be effective.

2-B. Develop supplementary sources of health information and assistance (a) that can be linked to radio PSAs, (b) that are more suited than 30-second radio spots to provide complex, extensive information on a variety of health topics, (c) that can be accessed when the information is needed, and (d) that are individualized.

Supplementary information sources could include telephone hotlines (either personally manned or operated through computers) which can offer information tailored to callers' needs; organizations which can be contacted for

counselling (e.g., Planned Parenthood; Alcoholics Anonymous; local medical associations); contact points for such mailed materials as information booklets, calendars which contain relevant health information, music related materials which also present health-related information.

Such individualized information sources tend to be particularly effective when concerned with "sanctioned" behaviors (drug use, sex, etc.); information on any health issue tends to be more effective when the receiver seeks it (rather than encounters it).

3. Devote more attention to using music-related print media to convey health messages to adolescents.

   Liner notes on records, tapes, and CDs and a wide assortment of popular music and teen magazines offer promise for getting health information to teenagers. Print media can include more information, and can help to simplify complex information. Because it is processed at a rate controlled by the reader, print information is often more effective.

4. Target health messages more specifically to the characteristics and needs of specific, at-risk subgroups of adolescents.

   Message effectiveness depends on how directly the message speaks to the receiver. Health messages should be targeted to subgroups defined in terms of their specific health concerns and knowledge, their music preferences, and their cultural context.

5. Increase emphasis on PSAs aimed at preventing adolescents from beginning risky behaviors (as opposed to getting them to quit what they have already begun).

   It is easier to establish new behaviors than to change old ones; it is easier to teach adolescents how not to start risky behaviors than how to quit them. Although it is important to continue to attempt to change the habits of teenagers who have already begun to smoke, drink, or engage in unsafe sexual practices, in the long run it may be more cost effective to focus on prevention as opposed to change.

In this context, it is also important to develop messages that teach youngsters how not to start a risky behavior as well as to convince them that they should avoid such risks. Indeed, in some areas of health behavior (for example, smoking), there is evidence that pre-adolescents do not need to be convinced that smoking is bad for them or that they should not smoke. However, they still fall to temptation, and many are smoking by early adolescence. Training in how to resist temptation (what it is, where it will come from, how it can be defended against) has been shown to be an effective way to preclude youngsters from starting smoking (see McAlister, 1981). These efforts can be integrated with recommendation 2, that radio PSAs be used to link youth to additional information sources.

6. Expand involvement of musicians and music personalities both in the production of PSAs, and to in-person presentations.

   Well-known rock stars are respected sources among young adolescents. When possible, they should be enlisted as talent to assist in the production of PSAs, with the caveat that care needs to be taken to match topic with the personality's reputation (a musician generally known to use elicit drugs should not be employed to produce an anti-drug message, for example).

   Since the dynamics of radio listening and MTV viewing may militate against attention to PSAs, however, local groups interested in health issues should enlist musicians and other music personalities to make personal appearances to young adolescents (e.g., in high school assemblies). Messages delivered in this context are quite likely to be attended to. To the extent that the personalities are well-coached, they can also make presentations in a way that will lend credibility to the efforts of teachers and health authorities.

7. Develop materials and methods to assist parents and teachers to discuss the health implications of music media messages with adolescents.

   This recommendation relates as much to preventing bad effects as to promoting good ones. Popular music has many messages related to health -- many which are troubling. However, many (most?)

parents and teachers are not prepared to discuss those messages; they tend to criticize, scorn, and/or forbid the music and musicians. Guidelines for adults would be helpful. Methods could be developed along the lines of the "critical television viewing" curricula already in existence (White, 1980), but the focus could be on health issues, thus making various required health education courses a natural entry point into school curricula.

8. Fund the production and distribution of "primary" entertainment content (songs and videos) with pro-health themes.

   An example is the funding by the U.S. Agency for International Development of several such recordings advocating sexual abstinence to Latin American teenagers. Given available descriptions of adolescent response to the first recording, such efforts would appear to offer some promise.

9. Conduct formative research and summative research on each of the messages and/or message types recommended above.

   Formative research refers to research conducted prior to, during, and immediately after message or campaign design and production to insure that audience parameters are fully understood and that the various elements of the message (or campaign) are accomplishing what they are intended to accomplish. Summative research refers to research conducted following production, designed to assess effectiveness of the message or campaign. For example, research that provided information on whether and to what degree the AID-funded song "Cuando Estemos Junto" ("When We're Together") influenced Latin American teenagers' sexual activity would be labeled summative research. Both formative and summative research are applied, action-oriented research; they are designed to speak to the effectiveness of a particular program (as opposed to aiding in theory development).

   Formative research. We have recommended such strategies as targeting messages at relevant audiences, linking radio PSAs to supplementary sources of information, using rock personalities as credible sources, and making greater use of music-related print materials. There is a growing literature which shows that most such strategies

will be of little avail unless preproduction research helps to define appropriate audiences and message strategies, and unless research conducted prior to and concurrent with production provides information on the degree to which successful messages or campaigns are being produced (see Palmer, 1981; Solomon, 1981).

Summative research. To the extent that any of the preceding recommendations are implemented, we need to know the degree to which they work. Research evaluating the effectiveness of particular programs can provide us with information that will be invaluable in designing future campaigns. However, since summative research typically is designed and conducted specific to a particular campaign, there is also a great need for more theoretically-based research. We present a research agenda in the following section.

B. Research Recommendations

Almost any question one wishes to raise about young adolescents and music media warrants new research. However, there are several areas in which empirical data are particularly needed, both because they will guide further research efforts and because they may have immediate implications for policy. We briefly list those that we view as most important.

1-A. At least four (and possibly more) independent national sample surveys of adolescent music media use are needed, one for each of the major racial/ethnic groups in the country: Caucasians, Blacks, Hispanics, Asians.

We suggest targeting the youth population 9 through 16 years of age. These surveys should emphasize music use, but need to include all media, since they are clearly interrelated. The surveys should also contain questions that begin to explore the relationships between music media use and the kinds of health-related information, attitudes and behaviors currently of most interest. One of the major deficiencies we find in the empirical literature is a lack of

representative samples. Much of the inconsistency across studies probably stems from the use of localized groups of respondents.

A second deficiency in the literature relates to the failure to obtain data from enough youths from the various minority groups to make valid inferences about differences within those groups. Few studies, even of television use, report data from sufficient numbers of Blacks, Hispanics or Asians to make valid subgroup comparisons beyond those based on gender differences. A decade ago, Allen and Beilby (1979) warned against conceiving of the Black television audience as a homogeneous sub-population that could be compared to whites. That warning holds just as true for young adolescents and music media.

If we are to examine socioeconomic, developmental, or any other kind of subgroup differences within racial and ethnic groups, it is imperative to employ large enough samples to make such comparisons. We suggest that a minimum of 1200 young adolescents from each of the four groups is necessary.

Depending on how one wishes to define the subgroup at risk and how much attention one wishes to pay to different cultural heritages, there may be a case for identifying and sampling from even more than the four major groups mentioned above. For example, there may be reason to differentiate between Chicanos, Cubans and other Hispanic-American groups; between Chinese, Japanese, East Asian and other Asian-Americans; between Jamaican or Haitian immigrants and other Black Americans. Similarly, we may wish to focus on more age groups. Here, for example, we might employ overlapping samples, one ranging from 9 through 13 years, a second from 12 to 16.

Items assessing health-related issues that might logically relate to music media need to be included in these surveys. We would like to know not only which youth use which media and which kinds of music, but whether such use is related to predictable constellations of health beliefs and behaviors.

1-B. In conjunction with the recommended national sample surveys, we suggest initiation of a panel study designed to follow a sample of children and young

adolescents at least four years in order to assess the extent to which music media use and health-related beliefs are causally related.

A subsample of the adolescents questioned in the national surveys recommended earlier could serve as panel participants, thereby reducing costs significantly. For example, the panel could use 250 youngsters from each of the four recommended samples and the national survey could serve as the Time 1 data collection.

Panel studies provide opportunities to make causal inferences by examining over-time changes in young adolescents' media use, whether through change scores, time-lagged correlational or more complex LISREL procedures. Such causal information is needed in order to make policy recommendations.

2. Research should be initiated to locate existing instruments or develop new instruments to identify which developmental issues given adolescents are dealing with at any particular time. We need the ability to identify subgroups of adolescents on the basis of their individual developmental needs in order to conduct the kinds of subgroup analyses called for in the opening sections of this paper.

Given the present concern with adolescent health, it would be particularly helpful to have instruments that would enable identification of youngsters primarily concerned with (a) cross- sex relationships, sexual identity, and sexual behavior; (b) body image; (c) establishing independence from family and other adult authorities; (d) peer-group relationships.

Each of these tasks should, theoretically, locate concerns with behaviors directly related to health. For example, teenagers concerned with cross-sex relationships and sexual identity are those most likely to consider sexual exploration, hence to be particularly attuned to information about sexual behavior, abstinence, safe-sex, appropriate and inappropriate cross-sex behaviors, and so on. Similarly, the ability to identify teenagers, both girls and boys, who are particularly concerned with issues of body image, may help us to locate audiences especially attuned to messages concerning nutrition and exercise, or who are at risk of being influenced by the "slim

ideal" often portrayed in U.S. mass media. Adolescents confronting issues concerning independence from the adult world or acceptance by the peer group might be most likely to manifest aggression or depression or to experiment with "rebellious" behaviors such as drug use or suicide.

3. We recommend that small-scale experimental studies be initiated to examine the potential impact on knowledge, attitudes, and behavior of print materials related to the music media (e.g., record jackets, music magazines, and posters and flyers promoting music stars).

   There is evidence from social marketing studies that the broadcast media may be more effective at directing people to print media or other sources of information than at providing that information themselves. We need to test whether this suggestion holds true for children and young adolescents, and what the most effective "other" information sources are. Studies in this vein also need to explore the most effective ways of using music media to link adolescents to these other sources.

4. Small-scale experimental studies should be initiated to examine which kinds of sources are most effective with which groups of teenagers for which kinds of issues.

   We question, for example, whether a rock star, at least the stereotypic heavy metal star, is the most appropriate source to present anti-drug information, even though he might be effective at providing other kinds of health-related information. Small-scale studies could do much to answer critical questions about the persuasion process in early adolescence within the context of music media and health.

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